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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/593,964	09/22/2006	Dieter Scheller	6102-000048/US/NP	4037

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EXAMINER	
JAVANMARD, SAHAR	

ART UNIT	PAPER NUMBER
1617	

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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No.	Applicant(s)	
	10/593,964	SCHELLER, DIETER	
	Examiner	Art Unit	
	SAHAR JAVANMARD	1617	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE *3* MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *15 May 2009*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *8-31* is/are pending in the application.

4a) Of the above claim(s) *25-31* is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *8-24* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☒ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☒ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date *11/26/07*.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

DETAILED ACTION

Status of the Claims

This Office Action is in response to applicant's remarks filed on May 15, 2009. Claim(s) 8-31 are pending. Claim(s) 25-31 are withdrawn from further consideration pursuant to 37 CFR 1.142(b) as being drawn to a nonelected invention, there being no allowable generic or linking claim. Applicant's election with traverse of the restriction requirement in the reply is acknowledged.

Applicant is traversing the restriction requirement between Group II and III and not the restriction between I and II-III. Applicant has elected Group I, therefore there is no traversal. As to the grounds of argument with respect to the restriction between Groups II and III, Applicant's arguments are persuasive and Groups II and III will be rejoined. The requirement is deemed proper and is therefore made FINAL. Claim(s) 1-8 are examined herein insofar as they read on the elected invention.

Claims 8-24 are examined herein.

Claim Rejections - 35 USC § 112

The following is a quotation of the first paragraph of 35 U.S.C. 112:

> The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

Claims 8-24 are rejected under 35 U.S.C. 112, first paragraph, for scope of enablement because the specification, while being enabling for the treatment of

Parkinson's plus syndrome, does not reasonably provide enablement for the prevention of Parkinson's plus syndrome as recited in these claims.

The instant claims are drawn to a pharmaceutical composition and a method for the prevention of Parkinson's plus syndrome. The instant specification fails to provide information that would allow the skilled artisan to practice the instant invention. Attention is directed to *In re Wands*, 8 USPQ2d 1400 (CAFC 1988) at 1404 where the court set forth the eight factors to consider when assessing if a disclosure would have required undue experimentation. Citing *Ex parte Forman*, 230 USPQ 546 (BdApls 1986) at 547 the court recited eight factors:

(1) the nature of the invention; (2) the state of the prior art; (3) the relative skill of those in the art; (4) the predictability or unpredictability of the art; (5) the breadth of the claims; (6) the amount of direction or guidance presented; (7) the presence or absence of working examples; and (8) the quantity of experimentation necessary.

Nature of the invention:

The instant invention pertains to a method for the prevention of Parkinson's plus syndrome.

The state of the prior art:

The skilled artisan would view that the prevention of one or more symptoms of Parkinson's plus syndrome totally, absolutely, or permanently, is highly unlikely, since one cannot guarantee that the Parkinson's plus syndrome will always be prevented.

The relative skill of those in the art:

The relative skill of those in the art is very high.

The predictability or lack thereof in the art:

The skilled artisan would view that the treatment to prevent Parkinson's plus syndrome, absolutely, or permanently is highly unpredictable.

The amount of direction or guidance presented and the presence or absence of working examples:

In the instant case, no working examples are presented in the specification as filed showing how to prevent Parkinson's plus syndrome totally, absolutely, or permanently. Note that lack of a working example, is a critical factor to be considered, especially in a case involving an unpredictable and undeveloped art. See MPEP 2164.

Genentech, Inc. v. Novo Nordisk, 108 F.3d at 1366, states that "a patent is not a hunting license. It is not a reward for search, but compensation for its successful conclusion" and "[p]atent protection is granted in return for an enabling disclosure of an invention, not for vague intimations of general ideas that may or may not be workable".

Therefore, in view of the *Wands* factors, e.g., the amount of direction or guidance provided, absence of working examples, and the predictability of the art discussed above, to practice the claimed invention herein, a person of skill in the art would have to

engage in undue experimentation to test the combination in the instant claims whether preventing Parkinson's plus syndrome totally, absolutely, or permanently.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

Claims 8, 11, 12, 14-18, 21-24 are rejected under 35 U.S.C. 103(a) as being unpatentable over Rimpler (2003/0166709 A1) in view of Mark (*Movement Disorders*, 2001) of record.

Rimpler teaches pharmaceutical compositions and methods of treatment for the chronic treatment of diseases associated with a dopamine-metabolic disorder. Examples of such diseases include Parkinson's disease and the Restless Leg syndrome [0107] employing N-0923 (i.e. rotigotine).

Rimpler teaches that after its application, the active agent is continually released from its solid phase over an extended period so that, in spite of the quick biological elimination of N-0923, a therapeutically effective plasma level of 0.1-15 ng/ml is obtained over a period of at least 24 hours, preferably more than 36 and most desirably

more than 48 hours. Preferred plasma levels are 0.2-10 ng rotigotine/ml, desirably 0.3-5 ng/ml and ideally 0.4-3 ng/ml [0043].

Rimpler teaches the active agent can be in the form of pharmaceutically acceptable salts including the salts of inorganic or organic acids such as hydrochloride, hydrobromide, hydrogen sulfate, carbonic acids or alkane sulphonic acid, or salts with metal cations [0047]. N-0923 hydrochloride is a particularly preferred example [0048].

Additionally Rimpler teaches that for the treatment the formulations can be applied in the form of monotherapy or in combination with other antiparkinsonian agents [0108], including members of the group of metabolic dopamine precursors, dopamine receptor agonists, dopamine transport blockers, MAO inhibitors, muscarine receptor antagonists, glutamate receptor antagonists, catechol-O-methyltransferase blockers, neurotrophins, immunophilin ligands, histamine antagonists, antioxidants, glutathione transferase activators, anti- apoptosis agents or calcium antagonists [0110].

Rimpler teaches that said active agents may be administered jointly with N-0923 in the pharmaceutical preparation according to the invention or they may be applied in a separately injectable or non-injectable formulation, for instance as a 'kit of parts'. In that context, the added antiparkinsonian agent may itself be formulated in retarded or nonretarded form [0112].

Rimpler teaches that the term "antiparkinsonian agent" refers to any active agent that is capable of favorably influencing a pathologically changed dopamine metabolism and/or able in any other way to reduce or prevent the progression or existence of

Parkinson's disease and/or to alleviate the symptoms accompanying Parkinson's disease [0109].

Rimpler does not teach the diseases associated with a dopamine-metabolic disorder as being Parkinson's plus syndrome.

Mark teaches dementia with Lewy bodies, multiple system atrophy, progressive supranuclear palsy, and cortical-basal ganglionic degeneration as disorders that are an atypical parkinsonian syndrome but because of their similarities with Parkinson's disease are misdiagnosed in 15-10% of patients (abstract).

Mark teaches that typically methods of treatment that are used to treat Parkinson's disease are employed to reduce the symptoms of the above disorders.

It would have been obvious to one of ordinary skill in the art at the time of the invention to have employed rotigotine as a method for the treatment of Parkinson's disease as taught by Rimpler and also employed said agent for the treatment of disorders collectively referred to as Parkinson's plus syndrome. Based on the teaching on Mark, it is evident that said conditions are currently treated with agents that are used to treat Parkinson's disease. Thus, it would have been obvious to one of ordinary skill in that art, to at least try, with a reasonable degree of success, rotigotine for the treatment of Parkinson's plus syndrome.

Claim 13 is unpatentable over Rimpler (2003/0166709 A1) in view of Mark (*Movement Disorders*, 2001) of record as applied to claims 8, 11, 12, 14-18, 21-24 above in further view of Lauterback (2003/0026830 A1).

Rimpler is discussed above.

Rimpler does not teach the administration of rotigotine transdermally.

Lauterback teaches a method of treating Parkinson's Disease by applying on a patient in need thereof a silicone-based transdermal therapeutic system having an area of 10 to 40 cm2 and containing 0.1 to 3.15 mg /cm2 of rotigotine as active ingredient, wherein said transdermal therapeutic system induces a mean plasma concentration of rotigotine in the range of 0.4 to 2 ng/ml 24 h after administration [0030].

It would have been obvious to one of ordinary skill in the art at the time of the invention to have employed rotigotine as an oral formulation as taught by Rimpler and employed said active agent for the treatment of Parkinson's Plus Syndrome as discussed above and also formulated said active agent in the form of a transdermal administration. The motivation provided by Lauterback teaches that rotigotine can be formulated as a transdermal therapeutic system as a method of treating Parkinson's disease and symptoms thereof. Thus as set forth on the record, it is obvious that rotigotine can be formulated in various forms and it is considered to be within the purview of one in the art to be able to optimize the various forms of administration in order to get optimum efficacy.

Claims 19 and 20 are unpatentable over Rimpler (2003/0166709 A1) in view of Mark (*Movement Disorders*, 2001) of record as applied to claims 8, 11, 12, 14-18, 21-24 above in further view of Daas (J. Pharm. Pharmacol., 1991) of record.

Rimpler and Mark are discussed above.

Neither Rimpler nor Mark teach the administration of rotigotine in the form of a prodrug.

Daas teaches carbamate ester prodrugs of rotigotine (page 11, figure 1). Daas teaches that in order to control fluctuations in the motor performance and involuntary movements in Parkinson's disease, the ideal dopamine agonist should be able to sustain in occupation on the dopamine receptors for a long time, thus a prodrug of the instant active agent would be of interest for the treatment of Parkinson's disease (page 11, column 1, paragraph 3).

Thus it would have been obvious to one of ordinary skill in the art at the time of the invention to have converted rotigotine into a prodrug form in order to control the metabolism of the compound such that constant plasma levels may be achieved as discussed above.

Conclusion

Claims 8-24 are not allowed.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR.

Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Sahar Javanmard whose telephone number is (571) 270-3280. The examiner can normally be reached on 8 AM-5 PM MON-FRI (EST).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Sreeni Padmanabhan can be reached on (571) 272-0629. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

/S. J./

Examiner, Art Unit 1617

/SREENI PADMANABHAN/

Supervisory Patent Examiner, Art Unit 1617